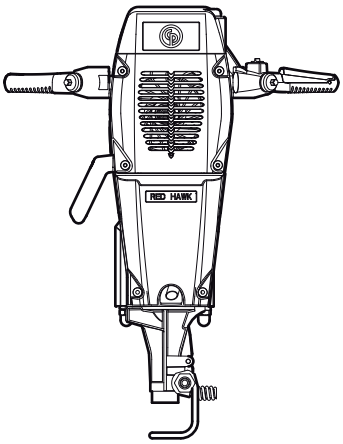
Chicago Pneumatic

Safety and operating instructions

Petrol breakers
Valid for United States of America only
CP Red Hawk



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Introduction

Thank you for choosing Chicago Pneumatic-brand products. For over a century, the Chicago Pneumatic brand has represented performance and innovation in the pneumatic tool industry.

Today the brand is found around the world on a range of pneumatic and hydraulic tools that includes breakers, rock drills, chipping hammers, clay-diggers, picks and busters, scabblers, pumps and a whole lot more.

The Chicago Pneumatic-brand is associated with powerful and reliable products that are easy to maintain and that give good value for the money.

For more information please visit www.cp.com

Atlas Copco Construction Tools AB
105 23 Stockholm
Sweden

About the Safety and operating instructions

The aim of the instructions is to provide you with knowledge of how to use the petrol breaker in an efficient, safe way. The instructions also give you advice and tell you how to perform regular maintenance on the petrol breaker.

Before using the petrol breaker for the first time you must read these instructions carefully and understand all of them.

Safety instructions

To reduce the risk of serious injury or death to yourself or others, read and understand the Safety and operating instruction before installing, operating, repairing, maintaining, or changing accessories on the machine.

Post this Safety and operating instruction at work locations, provide copies to employees, and make sure that everyone reads the Safety and operating instruction before operating or servicing the machine.

In addition, the operator or the operator's employer must assess the specific risks that may be present as a result of each use of the machine.

Safety signal words

The safety signal words Danger, Warning and Caution have the following meanings:

DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Personal precautions and qualifications

Only qualified and trained persons may operate or maintain the machine. They must be physically able to handle the bulk, weight, and power of the tool. Always use your common sense and good judgement.

Personal protective equipment

Always use approved protective equipment. Operators and all other persons in the working area must wear protective equipment, including at a minimum:

- Protective helmet
- Hearing protection
- Impact resistant eye protection with side protection
- Respiratory protection when appropriate
- Protective gloves
- Proper protective boots
- Appropriate work overall or similar clothing (not loose-fitting) that covers your arms and legs.

Drugs, alcohol or medication

⚠ WARNING Drugs, alcohol or medication

Drugs, alcohol or medication may impair your judgment and powers of concentration. Poor reactions and incorrect assessments can lead to severe accidents or death.

- ► Never use the machine when you are tired or under the influence of drugs, alcohol or medication.
- ► No person who is under the influence of drugs, alcohol or medication may operate the machine.

Installation, precautions

⚠ WARNING Ejected insertion tool

If the tool retainer on the machine is not in a locked position, the inserted tool can be ejected with force, which can cause personal injury.

- ► Always stop the machine before changing the inserted tool or accessories.
- ► Never point the inserted tool at yourself or anyone else.
- ► Make sure that the insertion tool is fully inserted and the tool retainer is in a locked position before the machine is started.
- ► Check the lock function by pulling the inserted tool outwards powerfully.

⚠ WARNING Moving or slipping insertion tool

An incorrect dimension of the inserted tool’s shank can result in that the inserted tool is lost or is slipping out during operation. Risk of severe injury or crushed hands and fingers.

- ► Check that the insertion tool has the shank length and dimensions that the machine is intended for.
- ► Never use an insertion tool without a collar.

Operation, precautions

⚠ DANGER Explosion hazard

If a warm insertion tool or exhaust pipe comes into contact with explosives, an explosion could occur. During operating with certain materials, sparks and ignition can occur. Explosions will lead to severe injuries or death.

- Never operate the machine in any explosive environment.
- Never use the machine near flammable materials, fumes or dust.
- Make sure that there are no undetected sources of gas or explosives.
- Avoid contact with the warm exhaust pipe or the bottom of the machine.

⚠ DANGER Fuel hazard

The fuel (petrol and oil) is extremely flammable and petrol fumes can explode when ignited, causing serious injury or death.

- Protect your skin from contact with the fuel. If fuel has penetrated the skin, consult a qualified health professional.
- Never remove the filler cap, and never fill the fuel tank when the machine is hot.
- Mix the fuel and fill the fuel tank outdoors or in a clean and well ventilated place, free from sparks and open flames. Fill the fuel tank at least ten meters (30 feet) from the place where the machine is to be used.
- Release the filler cap slowly to let pressure escape.
- Never overfill the fuel tank.
- Make sure the filler cap is screwed on when the machine is used.
- Avoid spilling fuel on the machine, wipe off any spilled fuel.
- Check regularly for fuel leaks. Never use the machine if it is leaking fuel.
- Never use the machine in the proximity of material that can generate sparks. Remove all hot or spark-generating devices before starting the machine.
- Never smoke when filling the fuel tank or when working with the machine or servicing it.
- Only store fuel in a container that is specially constructed and approved for the purpose.
- Consumed petrol and oil containers must be taken care of and returned to the retailer.
- Never use your fingers to check for fluid leaks.

⚠ WARNING Unexpected movements

The inserted tool is exposed to heavy strains when the machine is used. The inserted tool may break due to fatigue after a certain amount of use. If the inserted tool breaks or gets stuck, there may be sudden and unexpected movement that can cause injuries. Furthermore, losing your balance or slipping may cause injury.

- Make sure that you always keep a stable position with your feet as far apart as your shoulder width, and keeping a balanced body weight.
- Always inspect the equipment prior to use. Never use the equipment if you suspect that it is damaged.
- Make sure that the handles are clean and free of grease and oil.
- Keep your feet away from the inserted tool.
- Stand firmly and always hold on to the machine with both hands.
- Never start the machine when it is lying on the ground.
- Never ‘ride’ on the machine with one leg over the handle.
- Never strike or abuse the equipment.
- Check regularly for wear on the insertion tool, and check whether there are any signs of damage or visible cracks.
- Pay attention and look at what you are doing.

⚠ WARNING Dust and fume hazard

Dusts and/or fumes generated or dispersed when using the machine may cause serious and permanent respiratory disease, illness, or other bodily injury (for example, silicosis or other irreversible lung disease that can be fatal, cancer, birth defects, and/or skin inflammation).

Some dusts and fumes created by drilling, breaking, hammering, sawing, grinding and other construction activities contain substances known to the State of California and other authorities to cause respiratory disease, cancer, birth defects, or other reproductive harm. Some examples of such substances are:

- Crystalline silica, cement, and other masonry products.
- Arsenic and chromium from chemically-treated rubber.
- Lead from lead-based paints.

Dust and fumes in the air can be invisible to the naked eye, so do not rely on eye sight to determine if there is dust or fumes in the air.

To reduce the risk of exposure to dust and fumes, do all of the following:

- Perform site-specific risk assessment. The risk assessment should include dust and fumes created by the use of the machine and the potential for disturbing existing dust.
- Use proper engineering controls to minimize the amount of dust and fumes in the air and to minimize build-up on equipment, surfaces, clothing, and body parts. Examples of controls include: exhaust ventilation and dust collection systems, water sprays, and wet drilling. Control dusts and fumes at the source where possible. Make sure that controls are properly installed, maintained and correctly used.
- Wear, maintain and correctly use respiratory protection as instructed by your employer and as required by occupational health and safety regulations. The respiratory protection must be effective for the type of substance at issue (and if applicable, approved by relevant governmental authority).
- Work in a well ventilated area.
- If the machine has an exhaust, direct the exhaust so as to reduce disturbance of dust in a dust filled environment.
- Operate and maintain the machine as recommended in the operating and safety instructions
- Select, maintain and replace consumables/ inserted tools/ other accessory as recommended in the operating and safety instructions. Incorrect selection or lack of maintenance of consumables/ inserted tools/ other accessories may cause an unnecessary increase in dust or fumes.
- Wear washable or disposable protective clothes at the worksite, and shower and change into clean clothes before leaving the worksite to reduce exposure of dust and fumes to yourself, other persons, cars, homes, and other areas.
- Avoid eating, drinking, and using tobacco products in areas where there is dust or fumes.
- Wash your hands and face thoroughly as soon as possible upon leaving the exposure area, and always before eating, drinking, using tobacco products, or making contact with other persons.
- Comply with all applicable laws and regulations, including occupational health and safety regulations.
- Participate in air monitoring, medical examination programs, and health and safety training programs provided by your employer or trade organizations and in accordance with occupational health and safety regulations and recommendations. Consult with physicians experienced with relevant occupational medicine.
- Work with your employer and trade organization to reduce dust and fume exposure at the worksite and to reduce the risks. Effective health and safety programs, policies and procedures for protecting workers and others against harmful exposure to dust and fumes should be established and implemented based on advice from health and safety experts. Consult with experts.

⚠ DANGER Exhaust gas hazard

The exhaust gas from the machine's combustion engine contains carbon monoxide which is poisonous, and chemicals known to the State of California and other authorities to cause cancer, birth defects, or other reproductive harm. Inhalation of exhaust fumes can cause serious injury, illness, or death.

- Never inhale exhaust fumes.
- Never operate the machine indoors or in a poorly ventilated area.
- Never stand in a deep hole, ditch, or simular surrounding during operating.

⚠ WARNING Dust hazard

Some dusts, fumes or other airborne material created during use of the machine may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of such chemicals are:

- Crystalline silica, cement, and other masonry products.
- Arsenic and chromium from chemically-treated rubber.
- Lead from lead-based paints.

► To reduce your exposure to these chemicals, work in a well ventilated area and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

⚠ WARNING Projectiles

Failure of the work piece, of accessories, or even of the machine itself may generate high velocity projectiles. During operating, splinters or other particles from the working material may become projectiles and cause personal injury by striking the operator or other persons. To reduce these risk:

► Use approved personal protective equipment and safety helmet, including impact resistant eye protection with side protection.

► Make sure that no unauthorised persons trespass into the working zone.

► Keep the workplace free from foreign objects.

► Ensure that the work piece is securely fixed.

⚠ WARNING Splinters hazard

Using the insertion tool as a hand struck tool can result in splinters hitting the operator and can cause personal injury.

► Never use a insertion tool as a hand struck tool. They are specifically designed and heat-treated to be used only in a machine.

⚠ WARNING Slipping, tripping and falling hazards

There is a risk of slipping or tripping or falling, for example tripping on the hoses or on other objects. Slipping or tripping or falling can cause injury. To reduce this risk:

► Always make sure that no hose or other object is in your way or in any other person's way.

► Always make sure you are in a stable position with your feet as far apart as your shoulders width and keeping a balanced body weight.

⚠ WARNING Motion hazards

When using the machine to perform work-related activities, you may experience discomfort in the hands, arms, shoulders, neck, or other parts of the body.

► Adopt a comfortable posture whilst maintaining secure footing and avoiding awkward off-balanced postures.

► Changing posture during extended tasks may help avoid discomfort and fatigue.

► In case of persistent or recurring symptoms, consult a qualified health professional.

⚠ WARNING Vibration hazards

Normal and proper use of the machine exposes the operator to vibration. Regular and frequent exposure to vibration may cause, contribute to, or aggravate injury or disorders to the operator's fingers, hands, wrists, arms, shoulders and/or nerves and blood supply or other body parts, including debilitating and/or permanent injuries or disorders that may develop gradually over periods of weeks, months, or years. Such injuries or disorders may include damage to the blood circulatory system, damage to the nervous system, damage to joints, and possibly damage to other body structures.

If numbness, persistent recurring discomfort, burning sensation, stiffness, throbbing, tingling, pain, clumsiness, weakened grip, whitening of the skin, or other symptoms occur at any time, when operating the machine or when not operating the machine, stop operating the machine, tell your employer and seek medical attention. Continued use of the machine after the occurrence of any such symptom may increase the risk of symptoms becoming more severe and/or permanent.

Operate and maintain the machine as recommended in these instructions, to prevent an unnecessary increase in vibration.

The following may help to reduce exposure to vibration for the operator:

- Let the tool do the job. Use a minimum hand grip consistent with proper control and safe operation.
- If the machine has vibration absorbing handles, keep them in a central position, avoid pressing the handles into the end stops.
- When the percussion mechanism is activated, the only body contact with the machine you should have are your hands on the handle or handles. Avoid any other contact, for example supporting any part of the body against the machine or leaning onto the machine trying to increase the feed force. It is also important not to keep the start and stop device engaged while extracting the tool from the broken work surface.
- Make sure that the inserted tool is well-maintained (including sharpness, if a cutting tool), not worn out, and of the proper size. Insertion tools that are not well-maintained, or that are worn out, or that are not of the proper size result in longer time to complete a task (and a longer period of exposure to vibration) and may result in or contribute to higher levels of vibration exposure.
- Immediately stop working if the machine suddenly starts to vibrate strongly. Before resuming the work, find and remove the cause of the increased vibrations.
- Never grab, hold or touch the inserted tool when using the machine.
- Participate in health surveillance or monitoring, medical exams and training programs offered by your employer and when required by law.
- When working in cold conditions wear warm clothing and keep hands warm and dry.

See the "Noise and vibration declaration statement" for the machine, including the declared vibration values. This information can be found at the end of these Safety and operating instructions.

⚠ DANGER Electrical hazard

The machine is not electrically insulated. If the machine comes into contact with electricity, serious injuries or death may result.

- Never operate the machine near any electric wire or other source of electricity.
- Make sure that there are no concealed wires or other sources of electricity in the working area.

⚠ WARNING Concealed object hazard

During operating, concealed wires and pipes constitute a danger that can result in serious injury.

- Check the composition of the material before operating.
- Watch out for concealed cables and pipes for example electricity, telephone, water, gas and sewage lines etc.
- If the inserted tool seems to have hit a concealed object, switch off the machine immediately.
- Make sure that there is no danger before continuing.

⚠ WARNING Involuntary start

Involuntary start of the machine may cause injury.

- Keep your hands away from the start and stop device until you are ready to start the machine.
- Learn how the machine is switched off in the event of an emergency.

⚠ WARNING Noise hazard

High noise levels can cause permanent and disabling hearing loss and other problems such as tinnitus (ringing, buzzing, whistling or humming in the ears). To reduce risk and prevent an unnecessary increase in noise levels:

- Risk assessment of these hazards and implementation of appropriate controls is essential.
- Operate and maintain the machine as recommended in these instructions.
- Select, maintain and replace the insertion tool as recommended in these instructions.
- If the machine has a muffler, check that it is in place and in good working condition.
- Always use hearing protection.
- Use damping material to prevent work pieces from "ringing".

⚠ WARNING Unstable position hazard

During operation of the machine, there is a risk for falling, tripping and/or coming in contact with the inserted tool, which can cause injury. This risk increases if you work in an unstable position or on any unstable ground, object or surface. To reduce this risk:

- Never work in an unstable position.
- Always make sure you are in a stable position with your feet as far apart as your shoulder width and keeping a balanced body weight.
- Never stand on any unstable ground, objects or surfaces.

⚠ WARNING Slippery machine surface hazard

There is a risk that the machine (for example, the handle and other surfaces) is slippery due to grease, oil, or other substances. If the machine is slippery, there is a risk that you might lose your grip, drop the machine, and/or come in contact with the inserted tool during operation of the machine. Any such event can cause injury. To reduce this risk:

- Always make sure that the handles and other gripping surfaces of the machine are not slippery.
- Always make sure that the handles and other gripping surfaces are free from grease and oil.

Maintenance, precautions

⚠ WARNING Machine modification

Any machine modification may result in bodily injuries to yourself or others.

- Never modify the machine. Modified machines are not covered by warranty or product liability.
- Always use original parts, insertion tools, and accessories.
- Change damaged parts immediately.
- Replace worn components in good time.

⚠ CAUTION High temperature

The machine's front cover, exhaust pipe, and bottom become hot during operation. Touching it can lead to burns.

- Never touch a hot front cover.
- Never touch the hot exhaust pipe.
- Never touch the bottom of the machine when its hot.
- Wait until the front cover, exhaust pipe, and bottom of the machine has cooled down before carrying out maintenance work.

⚠ CAUTION Hot insertion tool

The tip of the insertion tool can become hot and sharp when used. Touching it can lead to burns and cuts.

- Never touch a hot or sharp insertion tool.
- Wait until the insertion tool has cooled down before carrying out maintenance work.

Storage, precautions

- Keep the machine and tools in a safe place, out of the reach of children and locked up.

Overview

To reduce the risk of serious injury or death to yourself or others, read the Safety instructions section found on the previous pages of this manual before operating the machine.

Design and function

CP Red Hawk is a hammering machine. It is equipped to be used for breaking asphalt and concrete. Equipped with the right accessories, the machine can also be used for driving posts, fences, and ground sampling.

CP Red Hawk is designed for breaking. No other use is permitted.

To choose the correct insertion tool, check the tool shank dimension on the machine, and see the spare parts list.

Choosing the correct breaker for a task

It is important to choose the correct size of breaker for the work to be performed.

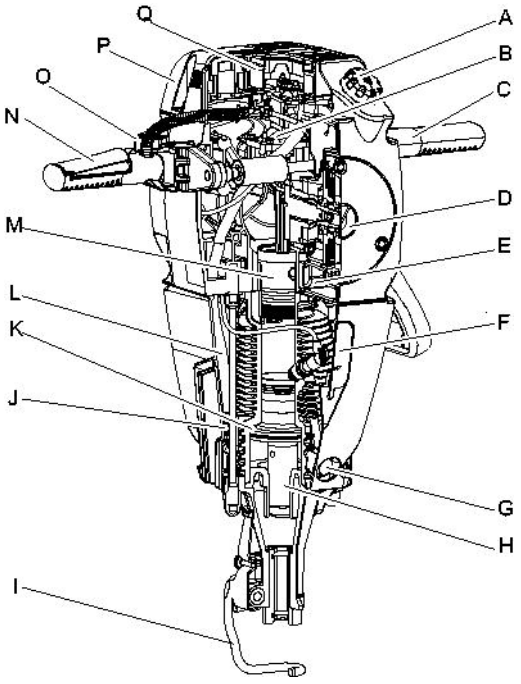
A breaker that is too small means that the work will take longer.

A breaker that is too large means that there must be frequent repositioning, which is unnecessarily tiring for the operator.

A simple rule for choosing the correct size of breaker is that a normal sized piece of broken material should be removed from the workpiece within 10–20 seconds operation.

- If it takes less than 10 seconds a smaller breaker should be selected.
- If it takes more than 20 seconds a larger breaker should be selected.

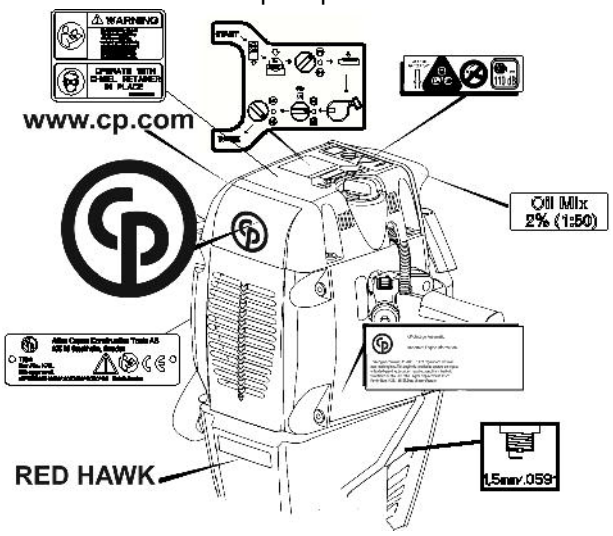
Main parts



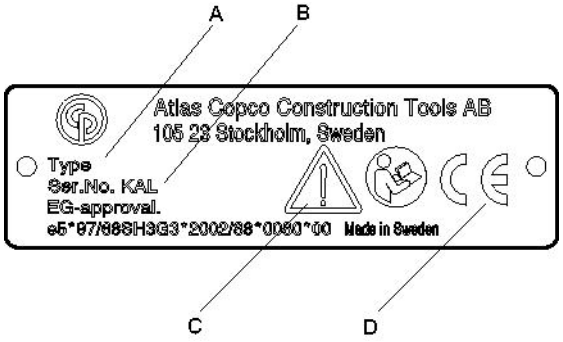
A. Tank cap
B. Reed valve
C. Vibration-dampened handle
D. Power take-off
E. Fuel filter
F. Spark plug cover
G. Percussion piston
H. Gas duct valve
I. Tool retainer
J. Compression chamber for flushing air
K. Intake valve for flushing air
L. Muffler
M Engine piston
N. Throttle lever
O. Stop button
P. Air filter cover
Q. Choke

Labels

The machine is fitted with labels containing important information about personal safety and machine maintenance. The labels shall be in such condition that they are easy to read. New labels can be ordered from the spare parts list.



Data plate



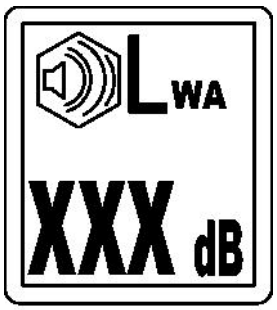
A. Machine type

B. Serial number

C. The warning symbol together with the book symbol means that the user must read the Safety and operating instructions before the machine is used for the first time.

D. The CE symbol means that the machine is EC-approved. See the EC Declaration of Conformity which is delivered with the machine for more information.

Noise level label



The label indicates the guaranteed noise level corresponding to EC-directive 2000/14/EC. See "Technical data" for accurate noise level.

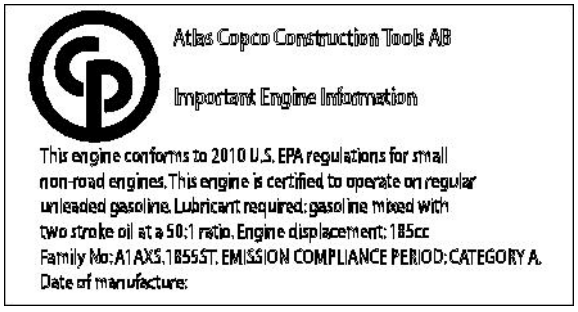
Warning label

WARNING
To reduce the risk of injury, everyone using, installing, repairing, maintaining, changing accessories on, or working near this tool must read and understand the safety instructions before performing any such task.
OPERATE WITH CHISEL RETAINER IN PLACE
9234000923

To reduce the risk of injury, everyone using, installing, repairing, maintaining, changing accessories on, or working near this tool must read and understand the safety instructions before performing any such task.

Operate with chisel retainer in place.

Emission compliance label


Atlas Copco Construction Tools AB
Important Engine Information
This engine conforms to 2010 U.S. EPA regulations for small non-road engines. This engine is certified to operate on regular unleaded gasoline. Lubricant required: gasoline mixed with two stroke oil at a 50:1 ratio. Engine displacement: 185cc
Family No: A1AXS.1855ST. EMISSION COMPLIANCE PERIOD: CATEGORY A.
Date of manufacture:

Emissions compliance period referred to on the label indicates the number of operating hours for which the engine has been shown to meet Federal emissions requirements.

Category C = 50 hours, B = 125 hours, and A = 300 hours.

Transport

⚠ WARNING Fuel hazard

► Empty the tank before transport.

Installation

Fuel

Two-stroke oil

The fuel is petrol with a 2% oil mixture (1 part oil to 50 parts petrol). Always use high quality lead-free petrol (non-alcylat).

For the best lubricating results use Chicago Pneumatic's environmentally friendly two-stroke oil, which has been specially developed for the petrol engined hammering machines.

If Chicago Pneumatic's two-stroke oil is not available, use a high quality two-stroke oil for air-cooled engines (not two-stroke oil for outboard engines). Contact your local representative for advice on the correct two-stroke oil.

Mixing the petrol and oil

Always mix the petrol and oil in a clean petrol can. First add the oil and then the correct amount of petrol. Then shake the can thoroughly. Shake the can before every refilling.

NOTICE During long term storage of two-stroke mixture, the oil and petrol can separate. Never mix more fuel than you intend to use within two weeks.

Filling

⚠ WARNING Fuel hazard

The fuel (petrol and oil) is extremely flammable and petrol fumes can explode when ignited, causing serious injury or death.

► Protect your skin from contact with the fuel.

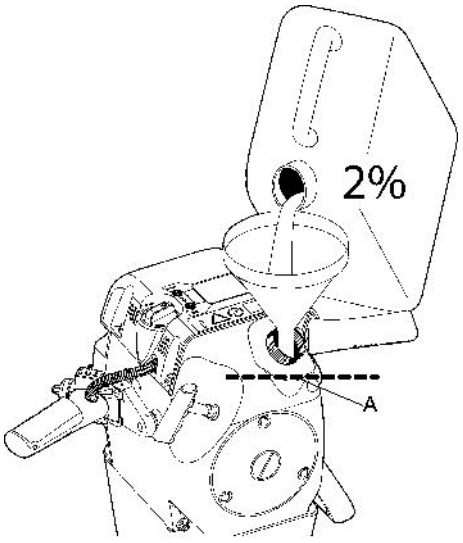
► Never remove the filler cap and never fill the fuel tank when the machine is hot.

► Never smoke when filling the fuel tank or when working with the machine or servicing it.

► Avoid spilling fuel and wipe off any fuel spilled on the machine.

Filling procedure

1. Stop the engine and let it cool down before filling the tank.
2. The machine must be in the upright position when filling with fuel.
3. Never overfill the tank (A).



4. Release the filler cap slowly to let any pressure escape.
5. Make sure that the filler cap is screwed on when the machine is used.

Insertion tool

⚠ CAUTION Hot insertion tool

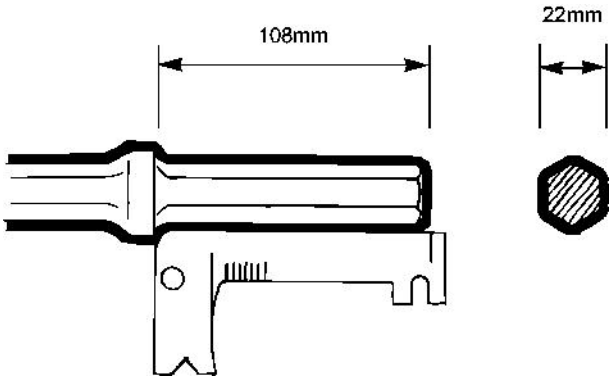
The tip of the insertion tool can become hot and sharp when used. Touching it can lead to burns and cuts.

► Never touch a hot or sharp insertion tool.

► Wait until the insertion tool has cooled down before carrying out maintenance work.

NOTICE Never cool a hot insertion tool in water, it can result in brittleness and early failure.

Checking for wear on the tool shank

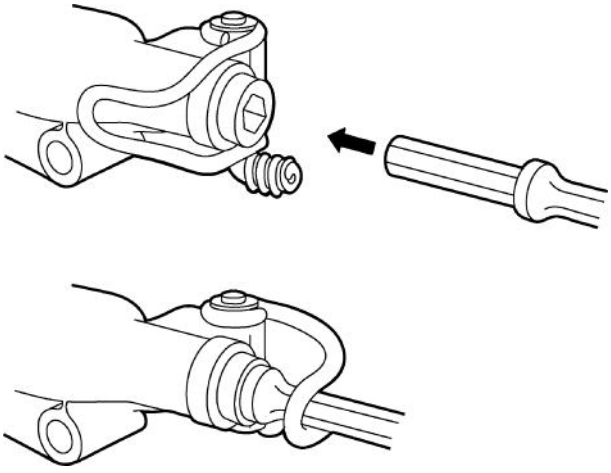


Use the gauge that corresponds to the insertion tool's shank dimension. See section "Technical data" for correct tool shank dimensions.

Fitting and removing the insertion tool

Whenever fitting or removing the insertion tool the following instructions must be observed:

1. Stop the machine and wait until the inserted tool has cooled down.
2. Fit or remove the insertion tool.

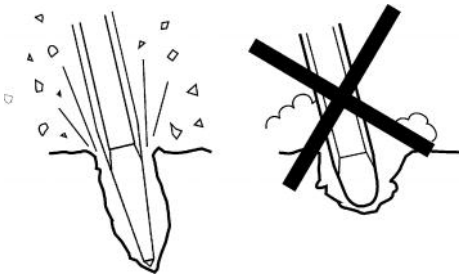


3. Close the tool retainer by using your foot.

⚠ WARNING Vibration hazard

Using inserted tools that do not fulfil the criterias mentioned below, will result in a longer time to complete a task, and may result in higher levels of vibration exposure. A worn tool will also cause increased working time.

- Make sure that the inserted tool is well-maintained, not worn out and of the proper size.
- Always use a sharp tool in order to work efficiently.



Operation

⚠ WARNING Involuntary start

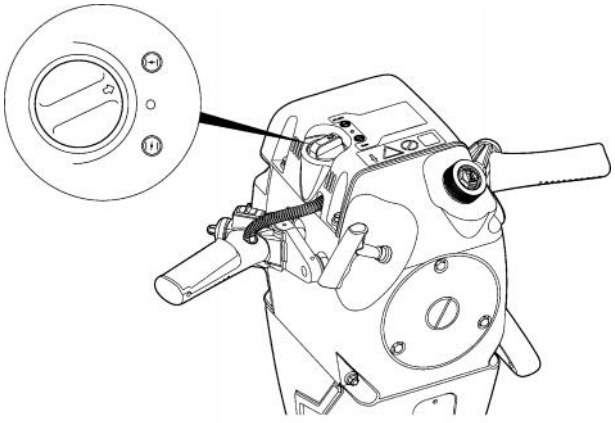
Involuntary start of the machine may cause injury.

- Keep your hands away from the start and stop device until you are ready to start the machine.
- Learn how the machine is switched off in the event of an emergency.

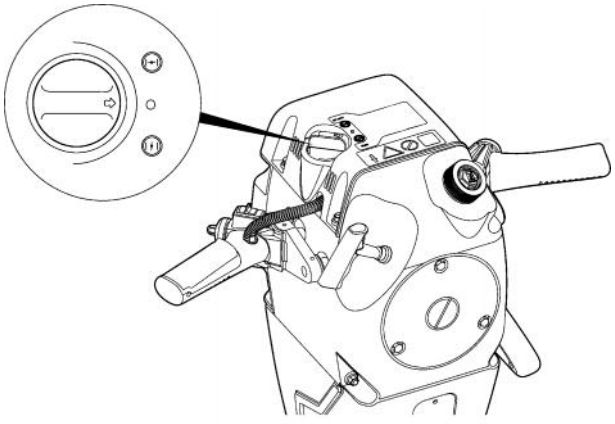
Start and stop

Cold start

1. Close the choke by turning the choke control anticlockwise to position (CHOKE).
2. Push the throttle lever down and pull the starter handle.



3. When the machine ignites, open the choke one step clockwise towards position (RUN). Let the machine run for a 30-60 seconds warm up period.



Restarting a warm machine

If a hot engine stops after a short while or does not start at all, use the following restart procedure:

1. Check that the choke is open (in position RUN).
2. Pull the starter handle.
3. If the machine still does not start follow the procedure for "Cold start" or see the section "Troubleshooting".

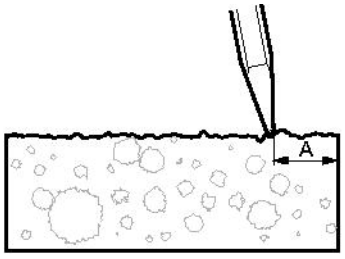
Stopping

1. Stop the machine by sliding the stop button on the left handle forward.

Operating

Starting a cut

- Stand in a stable position with your feet well away from the inserted tool.
- Press the machine against the working surface before you start.
- The working speed of the machine is controlled via the throttle lever.
- Start collaring at such a distance from the edge that the machine is capable of breaking the material without leverage.
- Never break off too large pieces. Adjust the breaking distance (A) so that the inserted tool does not fasten.



Breaking

- Never use the machine as a lever, the material should be broken by impact energy.
- Let the machine do the work. Never press too hard. The vibration absorbing handle should never be forced all the way to the bottom.
- Release the throttle lever when the machine is lifted.

When taking a break

- Stop the machine during breaks.
- During all breaks you must put the machine away so that there is no risk for unintentional start.

Maintenance

Regular maintenance is a basic requirement for the continued safe and efficient use of the machine. Follow the maintenance instructions carefully.

- Before starting maintenance on the machine, clean it in order to avoid exposure to hazard substances. See “Dust and fume hazards”
- Use only authorised parts. Any damage or malfunction caused by the use of unauthorised parts is not covered by warranty or product liability.
- When cleaning mechanical parts with solvent, comply with appropriate health and safety regulations and ensure there is satisfactory ventilation.
- For major service to the machine, contact your nearest authorised workshop.
- After each service, check that the machine's vibration level is normal. If not, contact your nearest authorised workshop.

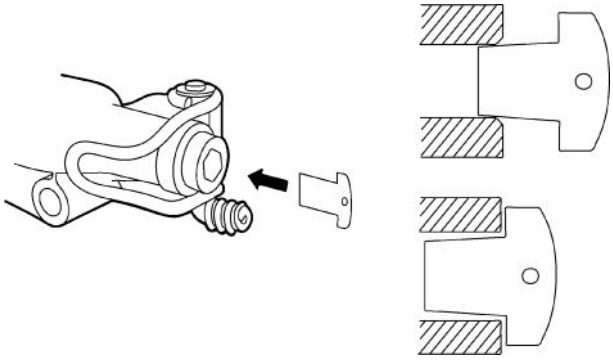
Every day

Before undertaking any maintenance or changing the inserted tool, turn the machine off.

- Clean and inspect the machine and its functions each day before the work commences.
- Perform a general inspection and check that there are no leaks and no damage.
- Check the insertion tool, make sure that it is sharp and not worn out.
- Change damaged parts immediately.
- Replace worn components in good time.

In order to ensure that the machine remains within the stated vibration level values, the following checks must be performed:

Tool chuck check

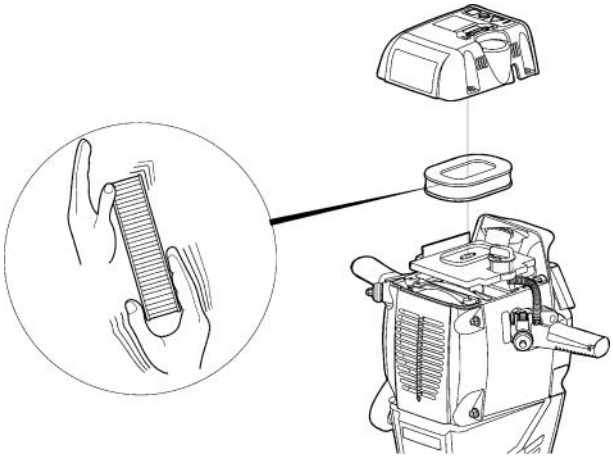


If the chuck gauge provided can be inserted fully across the flats of the hexagon chuck, this indicates that the chuck is worn out and must be replaced.

Air filter check

In the event of continuous use, check and change the air filters at least every shift.

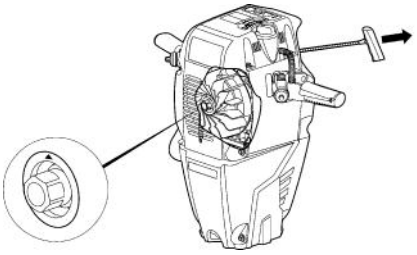
1. Unscrew the air filter cover.
2. Carefully strike the filter against the palm of your hand. The filter must never be washed. Extremely dirty filter must be replaced.



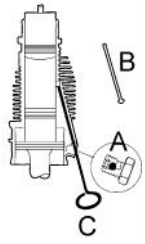
Gas duct check

The gas duct must be checked regularly for carbon deposits, and cleaned if necessary.

1. Pull the starting handle until the arrow in the centre of the flywheel (which can be seen through the fan cover) points upwards. This indicates that the engine piston is in the upper position.



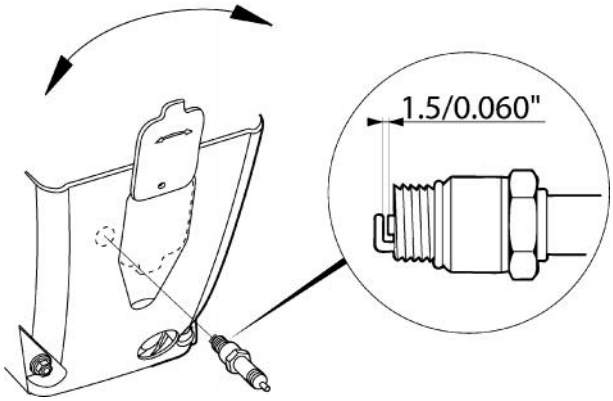
2. Unscrew the gas duct valve (A) and take out the cleaning rod (B).
3. Clean the gas duct valve (A) and cleaning rod (B) using the cleaning needle (C) provided.



4. Clean the thread on the gas duct valve (A).
5. Clean the channel using the cleaning needle (C) provided.
6. Check that the ball in the gas duct valve (A) is not stuck.

Spark plug check

1. Lift the spark plug cover by the lower lip, and turn it up to one side.

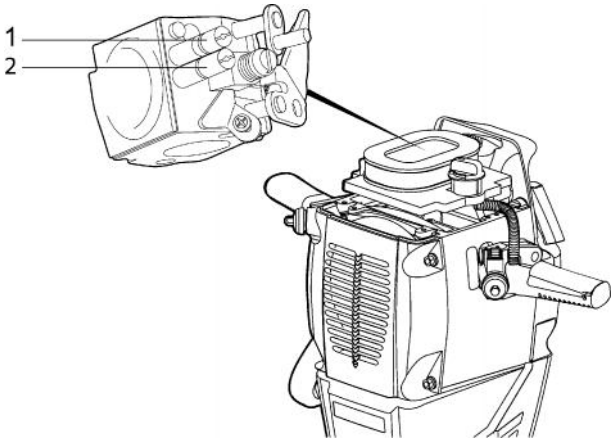


2. Use a plug spanner to remove the spark plug.
3. If the spark plug is dirty or burned, it must be replaced. Use original Bosch WR7AC spark plugs.
4. If the electrodes are wet from fuel, dry them off, check the ignition spark, and pull the starter handle 2–3 times to ventilate off any excess fuel.
5. Fit the spark plug back into the cylinder and make sure that the electrode gap is 1.5 mm (0.060 in.).

Carburettor check

On delivery the carburettor is adjusted and locked so it meets EPA's exhaust-gas standard.

Adjustments of the carburettor must be done by an authorized workshop.



No.	Carburettor	Settings
1	Main nozzle	1,6 turns open
2	Idling nozzle	2,5 turns open

When loaded, the maximum revs should be 2550–2700 rpm. The idling revs should be 1600–1800 rpm.

Every year

Overhauling should be done after 1 year of continuous operation. Overhauling should for safety reasons be performed by authorised personnel at an authorised workshop.

Repair

Replacing the starter cord

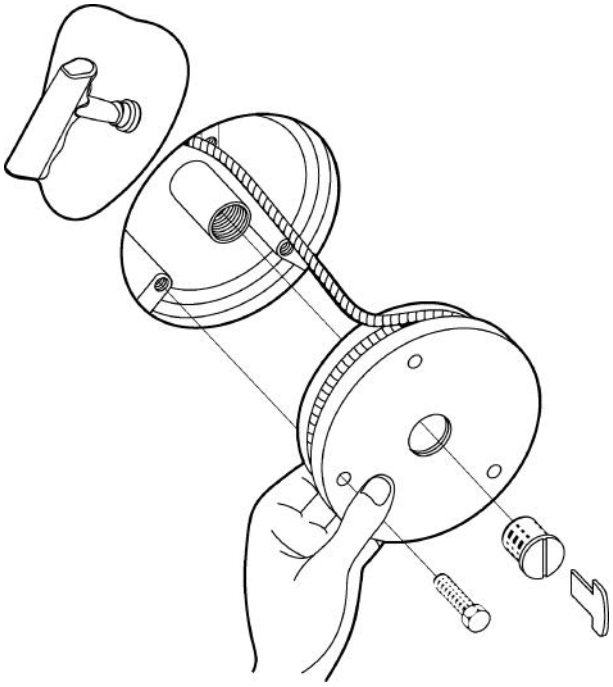
⚠ WARNING Spring tension

The starter spring may cause personal injury by striking the operator or other persons.

► Wear impact resistant eye protection with side protection and gloves.

Removing the old starter cord

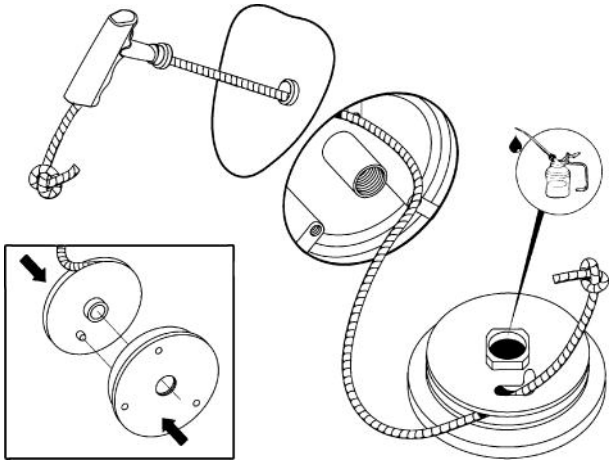
1. Remove the screw-cap of the PTO and the three bolts from the protective cover of the starting mechanism.



2. Lift off the cover, grasping the starter pulley as well. Let the cover rotate carefully against the starter pulley, to release the spring tension.
3. Remove the old starter cord.

Fitting a new starter cord

4. Oil the needle bearing in the starter pulley.



5. Fit the starter pulley and protective cover together, so that the starting spring locates in the starter pulley.
6. Wind the full length of the cord onto the pulley.

7. Pre-tension the starting spring by one turn (clockwise) before fitting the assembly into place.
8. Pull the starting handle carefully, in order to locate the cover correctly.
9. Fit and tighten the hexagonal bolts and the PTO screw-cap.

Troubleshooting

If the engine does not start, is difficult to start, runs unevenly or has poor output, check the points mentioned below.

- Check that the stop button is in the ON position.
- Check the fuel level.
- Check the spark plug's electrode distance.
- Check that the air filter is not blocked.
- Check that the fuel filter is not blocked.
- If the machine still does not work satisfactorily following this procedure, please contact your nearest authorised workshop.

Storage

- Empty the tank before storing the machine.
- Check that the machine is properly cleaned before putting it away for storage.
- Store the machine in a dry place.
- We recommend to store the machine in a standing position. If stored in a lying position, the machine must be placed on the back cover.
- Keep the machine and tools in a safe place, out of the reach of children and locked up.

Disposal

A used machine must be treated and deposed of in such a way that the greatest possible portion of the material can be recycled and any negative influence on the environment is kept as low as possible, and in respect to local restrictions.

Before a petrol driven machine is deposited it must be emptied and cleaned of all oil and petrol. Remaining oil and petrol must be dealt with in a way that does not affect the environment.

Technical data

Products

Description	Tool shank size, in. (mm)	Part number
CP Red Hawk	⅞ x 4¼ (22 X 108)	8318 0900 00

Machine data

	CP Red Hawk
Type	1 cylinder, two-stroke, air cooled
Cylinder displacement, ci (cc)	11.3 (185)
Power kw (hp)	2.0 (2.7)
Full speed, loaded machine with tamping tool on bed of sand, crankshaft (strokes/min)	2600–3000
Speed, unloaded machine, idling (strokes/min)	1600–1800
Carburettor	Membran type (Walbro)
Ignition system	Thyristor type, breakerless
Spark plug (recommended)	Bosch WR7AC
Spark plug gap, in. (mm)	0.060 (1.5)
Fuel type	Petrol (gasoline), Unleaded (non-alkylat), 90–100 octane
Starter	Magnapull
Fuel tank capacity, litres (oz)	1.2 (40.6)
Two-stroke oil	Use a high-quality two-stroke oil for air-cooled two-stroke motors, e.g. Castrol TTS (not two-stroke oil for outboard motors)
Fuel mixture	2% (1:50)
Fuel consumption, gallon/hour (litres/hour)	0.29–0.37 (1.1–1.4)
Length, in. (mm)	27 ⅓ (694)
Depth, mm (in.)	281 (11)
Width max, in. (mm)	23 (585)
Weight, lb (kg)	49.8 (22.5)
Ambient temperature, C° (F)	-15 to +37 (5 to 98.6)

Noise and vibration declaration statement

Guaranteed sound power level **Lw** according to ISO 3744 in accordance with directive 2000/14/EC.

Sound pressure level **Lp** according to ISO 11203.

Vibration value **A** and uncertainty **B** determined according to ISO 20643. See table ”Noise and vibration data” for the values of A, B, etc.

These declared values were obtained by laboratory type testing in accordance with the stated directive or standards and are suitable for comparison with the declared values of other tools tested in accordance with the same directive or standards. These declared values are not suitable for use in risk assessments and values measured in individual work places may be higher. The actual exposure values and risk of harm experienced by an individual user are unique and depend upon the way the user works, in what material the machine is used, as well as upon the exposure time and the physical condition of the user, and the condition of the machine.

We, Atlas Copco Construction Tools AB, cannot be held liable for the consequences of using the declared values, instead of values reflecting the actual exposure, in an individual risk assessment in a work place situation over which we have no control.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed. An EU guide to managing hand-arm vibration can be found at http://www.humanvibration.com/EU/VIBGUIDE.htm

We recommend a programme of health surveillance to detect early symptoms which may relate to vibration exposure, so that management procedures can be modified to help prevent future impairment.

Noise and vibration data

	Noise		Vibration	
	Declared values		Declared values	
	Sound pressure	Sound power	Three axes values	
	ISO 11203	2000/14/EC	ISO 20643	
Type	**Lp** r=1m dB(A) rel 20µPa	**Lw** guaranteed dB(A) rel 1pW	**A** m/s^2 value	**B** m/s^2 spreads
CP Red Hawk	94	107	8.4	2.5

EC Declaration of Conformity

EC Declaration of Conformity (EC Directive 2006/42/EC)

We, Atlas Copco Construction Tools AB, hereby declare that the machines listed below conform to the provisions of EC Directive 2006/42/EC (Machinery Directive) and 2000/14/EC (Noise Directive), and the harmonised standards mentioned below.

Motor breaker	Guaranteed sound power level [dB(A)]	Measured sound power level [dB(A)]
CP Red Hawk	107	105

Following harmonised standards were applied:

- ISO/FDIS 11148-4

Following other standards were applied:

- 2000/14/EC, appendix VIII
- 2005/88/EC
- Lloyds Register Quality Assurance, NoBo no.0088

Technical Documentation authorised representative:
Erik Sigfridsson
Atlas Copco Constructions Tools AB
Dragonvägen 2
Kalmar
General Manager:
Erik Sigfridsson

Manufacturer:
Atlas Copco Constructions Tools AB
105 23 Stockholm
Sweden
Place and date:
Kalmar, 2010-01-01

Warranty

This warranty only applies in the United States of America.

Emission control system warranty

Atlas Copco Construction Tools AB warrants to the initial purchaser of the machine and each subsequent owner that the engine in the machine (in Atlas Copco-brand breaker/drill models Cobra Pro, Cobra TT, Cobra Combi and in Chicago Pneumatic-brand breaker model CP Red Hawk, as applicable) meets the following two conditions: (1) the engine, including all parts of its emission control system, is designed, built, and equipped so it conforms at the time of sale to the initial purchaser with the applicable requirements in 40 CFR Part 1054 regulated by the U.S. Environmental Protection Agency; and (2) the engine, including all parts of its emission control system, is free from defects in materials and workmanship that may keep it from meeting the applicable requirements in 40 CFR Part 1054 regulated by the U.S. Environmental Protection Agency. (The above-stated warranty is referred to herein as "this Emission Control System Warranty".) This Emission Control System Warranty covers all components whose failure would increase the engine's emissions of any pollutant regulated by the United States Environmental Protection Agency under 40 CFR Part 1054.

The warranty period for this Emission Control System Warranty begins on the date of sale of the machine to the initial purchaser and ends two years thereafter.

Where a warrantable condition exists under this Emission Control System Warranty, warranty repairs will be made by an Atlas Copco Representative (as defined below) or by a service facility designated by the Atlas Copco Representative, without charge for diagnosis, parts, or labor, subject to all other provisions stated herein. All defective parts replaced under this Emission Control System Warranty become the property of the Atlas Copco Representative. Normal maintenance items are warranted up to their first required replacement interval only. Only Atlas Copco Construction Tools AB approved replacement parts may be used in the performance of any warranty repairs under this Emission Control System Warranty and will be provided without charge.

This Emission Control System Warranty does not extend to components or parts which are affected or damaged by the machine owner's or any other person's (other than Atlas Copco Construction Tools AB's or the Atlas Copco Representative's) improper use or improper maintenance (including, but not limited to, improper replacement of filters, sparkplugs or other maintenance items or wear parts; incorrect oil or fuel; stale or improper fuel mix; dirt or other contaminants in the fuel or oil; excessive dirt, dust, rust, or corrosion in the engine; improper storage; use of replacement parts or accessories not conforming to the original specifications which impair the effectiveness of the emission control system; incorporation of or use of unsuitable attachments or unauthorized alteration of any part; or improper repair), abuse, accident, or acts of God.

This Emission Control System Warranty does not cover replacement of expendable maintenance items (for example spark plugs and filters) unless they are original items defective in material or workmanship and the first required replacement interval (in accordance with applicable instructions published by the machine manufacturer) for the item has not been reached.

Responsibility for Maintenance:
As the machine engine owner, you are responsible for the performance, at your expense, of the proper maintenance of the engine (in addition to all other parts of the machine and accessories) in accordance with applicable instructions published by the machine manufacturer, including in the Safety and Operating Instructions manual for the machine. Atlas Copco Construction Tools AB recommends that you retain all receipts and maintenance records covering performance of maintenance. Proper maintenance includes, but is not limited to, routine replacement and servicing of spark plugs, filters, other expendable wear parts, and any other part or item related to emission control or that may affect emissions.

Requirements related to warranty claims:
Warranty repairs may only be performed by an Atlas Copco Representative or by a service facility designated by the Atlas Copco Representative to perform the warranty repair. "Atlas Copco Representative" means the dealer in the United States from whom your machine was initially purchased as a new machine or a service facility in the United States that is owned or operated by Atlas Copco Construction Equipment LLC and which performs warranty repair of such machine engines. You are responsible for promptly presenting the machine

(into which the engine is incorporated) to the nearest Atlas Copco Representative as soon as a warrantable condition exists under this Emission Control System Warranty. At the time of requesting warranty repair, you must provide proof of the initial purchase of the machine, including the initial purchase date.

If you are located more than 100 miles from the nearest Atlas Copco Representative, the Atlas Copco Representative will (at its choice) (i) pay for shipping costs of the machine to and from the nearest Atlas Copco Representative; (ii) provide for a technician to come to you to make the warranty repair under this Emission Control System Warranty; or (iii) pay for the warranty repair to be made at a local service facility designated by the Atlas Copco Representative to perform the warranty repair on your machine engine under this Emission Control System Warranty. (The provisions in the preceding sentence apply only for the contiguous states, excluding the states with high-altitude areas identified in 40 CFR 1068, Appendix III.) If you are located within 100 miles of an Atlas Copco Representative, you will be responsible for paying all shipping/ transportation costs, technician travel costs if the technician comes to you, and other similar costs, unless the Atlas Copco Representative in its discretion elects to pay for such costs or any portion thereof.

If the Atlas Copco Representative determines that there is no warrantable condition under this Emission Control System Warranty, you will be responsible for the cost of the diagnosis, labor and parts in accordance with the Atlas Copco Representative's normal rates, costs of shipping/ transporting (regardless of your distance to an Atlas Copco Representative), technician travel costs if the technician comes to you, and other similar costs, unless the Atlas Copco Representative in its discretion elects to pay for such costs or any portion thereof.

For information about how to make a warranty claim and how to make arrangements for authorized warranty repair, please contact the dealer in the United States from whom your machine was initially purchased as a new machine. You may also contact Atlas Copco Construction Equipment LLC via telephone at 1-800-760-4049 or via email to acceservice@us.atlascopco.com.

Chicago Pneumatic Construction Tools warranty statement

Chicago Pneumatic Construction Tools products are warranted to be free from defects in material and workmanship for 12 months* from the date of purchase, provided that usage is limited to single shift operation throughout that period. If the usage rate exceeds that of single shift operation, the warranty period shall be reduced as per a pro-rata basis.

This warranty applies only to products purchased new** from Chicago Pneumatic Construction Tools or an Authorized Service Center. This warranty does not apply to products which have been misused, modified, and/or repaired by someone other than Chicago Pneumatic Construction Tools or an Authorized Service Center.

If a Chicago Pneumatic Construction Tools product appears defective in material or workmanship within the warranty period, return it or ship postage paid to any Authorized Service Center for Chicago Pneumatic Construction Tools. Please enclose your name, address, dated proof of purchase and a short description of the defect. Failure to do so could result in delay of product repair or replacement. Chicago Pneumatic Construction Tools will, at its sole discretion, repair or replace defective products free of charge. Repairs or replacements are warrantied as described above for the remainder of the original warranty period. Chicago Pneumatic Construction Tools sole liability and your exclusive remedy under this warranty is limited to repair or replacement of the defective Product.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, OR CONDITIONS, WRITTEN OR ORAL, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL WARRANTIES, OR CONDITIONS, OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY DISCLAIMED, THERE SHALL BE NO LIABILITY FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, OR ANY OTHER DAMAGES, COSTS OR EXPENSES, EXCEPTING ONLY THE COST OR EXPENSE OF REPLEMENT OR REPAIR.

* Unless otherwise stated in the warranty supplied with the product.

** Use only authorized parts. Any damage or malfunction caused by the use of unauthorized parts is not covered by warranty.

Chicago Pneumatic

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